

ABSTRACT OF THE DISCLOSURE

A scheduler permits efficient and flexible scheduling between simultaneous users of an air interface in a wireless communication networks in consideration of desired QoS parameters and class-based preferential scheduling. By appropriately defining the utility functions used by the scheduler in user scheduling, scheduling may, among other goals, be biased toward satisfaction of average or minimum throughput constraints, be biased toward meeting QoS delay constraints, or be biased based on combined considerations of these goals. Where QoS delay constraints are considered, the scheduler might adopt a dynamic approach to updating delay terms in the utility functions, such that users are not over-served or underserved relative to a desired quality of service.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100